Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method comprising:

a video source device and a first video repeater device cooperatively authenticating the first video repeater device to the video source device;

the first video repeater device and first at least one video sink device cooperatively ~~and correspondingly~~ authenticating the first ~~at least one~~ video sink device to the first video repeater device; and

the video source device and the first video repeater device cooperatively authenticating the first ~~at least one~~ video sink device to the video source device;

wherein said cooperative authentication of the first video ~~repeater~~ sink device to the video source device comprises:

said first video repeater device ~~identifying itself as a repeater device to said video source device~~ providing, to said video source device, a device key selection vector for the first video sink device.

2. (currently amended) The method of claim 1, wherein said cooperative authentication of the first video repeater device to the video source device comprises said video source device and said first video repeater device employing ~~an identical~~ a substantially identical authentication protocol said video source device and a video sink device would employ to authenticate said video sink device to said video source device, and augmenting said ~~identical~~ substantially identical authentication protocol with identification of said first video repeater device as a repeater device to said video source device.

3. (previously presented) The method of claim 1, wherein said cooperative authentication of the first video repeater device to the video source device further comprises:

said video source device and said first video repeater device exchanging device key selection vectors with each other;

said first video repeater device providing said video source device with a verification key generated using a symmetric ciphering process with an authentication key generated using the received device key selection vector of said video source device; and

said video source device verifying said verification key provided by said first video repeater device.

4. (original) The method of claim 3, wherein said cooperative authentication of the first video repeater device to the video source device further comprises said first video repeater device generating said authentication key using said received device key selection vector of said video source device and its own device key.

5. (currently amended) The method of claim 1, ~~wherein~~ wherein:

said cooperative authentication of the first video repeater device to the video source device comprises said video source device and said first video repeater device exchanging device key selection vectors with each other; and

said method further comprises said video source device and said first video repeater device each independently generating a shared secret using a symmetric ciphering process using an authentication key generated using at least one of said device key selection vectors ~~of said video source device and said first video repeater device~~.

6. (currently amended) The method of claim 1, wherein said cooperative authentication between said first video repeater device and said video source device of the ~~at least one~~ video sink device to the video source device ~~comprises~~ comprises:

said first video repeater device providing ~~a device key selection vector of each of said first at least one video sink device, and~~ a verification signature generated using the provided device key selection vector~~/key selection vectors~~ and a shared secret value between said video source device and said first video repeater device; and

said video source device verifying said verification signature.

7. (currently amended) The method of claim 6, wherein said method further comprises said video source device and said first video repeater device each ~~independently~~ generating said shared secret value using a symmetric ciphering process with an authentication key generated based on device key selection ~~vector of~~ vectors in said video source device and said first video repeater device.

8. (currently amended) The method of claim 1, wherein

said method further comprises said video source device and a video sink device cooperatively authenticating said video sink device to said video source device;

both of said cooperative authentication of said first video repeater device and said video sink device to said video source device employing ~~an identical~~ a substantially identical authentication protocol, with said cooperative authentication of said first video repeater device to said video source device augmenting said ~~identical~~ substantially identical authentication protocol with said first video repeater device identifying itself as a repeater device to said video source device.

9. (original) The method of claim 1, wherein said method further comprises

said first video repeater device and a second video repeater device cooperatively authenticating second at least one video sink device to said first video repeater device; and

said video source device and said first video repeater device cooperatively authenticating said second at least one video sink device to said video source device.

10. (currently amended) The method of claim 9, wherein said video source device and said first video repeater device cooperatively authenticating said first and second at least one video sink device to said video source device at substantially the same time.

11. (original) The method of claim 9, wherein said method further comprises said first video repeater conveying topological information of said first and second at least one video sink device to said video source device.

12. (currently amended) In a first video repeater device, a method comprising:

in cooperation with a video source device, authenticating itself to the video source device;

~~correspondingly~~ in cooperation with at least one video sink device, authenticating first at least one video sink device to said first video repeater device; and

in cooperation with the video source device, authenticating the first ~~at least one~~ video sink device to the video source ~~device~~ device;

wherein said authentication of the first video sink device to the video source device comprises:

said first video repeater device providing, to said video source device, a device key selection vector for the first video sink device.

13. (currently amended) The method of claim 12, wherein said cooperative authentication of the first video repeater device to the video source device comprises said first video repeater device employing ~~an identical~~ a substantially identical authentication protocol a video sink device would employ to authenticate said video sink device to said video source device, and augmenting said ~~identical~~ substantially identical authentication protocol with identification of said first video repeater device as a repeater device to said video source device.

14. (currently amended) The method of claim 12, wherein said cooperative authentication of the first video repeater device to the video source device comprises:

exchanging device key selection ~~vector~~ vectors with said video source device;

identifying said first video repeater device as a repeater device to said video source device; and

providing said video source device with a verification key generated using a symmetric ciphering process with an authentication key generated using the received device key selection vector of said video source device.

15. (original) The method of claim 14, wherein said cooperative authentication of the first video repeater device to the video source device further comprises generating said authentication key using said received device key selection vector of said video source device and its own device key.

16. (currently amended) The method of claim 12, ~~wherein~~ wherein:

said cooperative authentication of the first video repeater device to the video source device comprises exchanging device key selection ~~vector~~ vectors with said video source device; and

said method further comprises independently generating a shared secret with said video source device using a symmetric ciphering process using an authentication key generated using at least one of said device key selection vectors ~~vector of said video source device and said first video repeater device~~.

17. (currently amended) The method of claim 12, wherein said cooperative authentication of the ~~at least one~~ first video sink device to the video source device comprises providing ~~a device key selection vector of each of said first at least one video sink device, and~~ a verification signature generated using the provided device key selection vector/~~key selection vectors~~ and a shared secret value with said video source device.

18. (original) The method of claim 17, wherein said method further comprises independently generating said shared secret value using a symmetric ciphering process with an authentication key generated based on device key selection vectors of said video source device and said first video repeater device.

19. (currently amended) The method of claim 12, wherein said method further comprises

a second video repeater device in cooperation with said first video repeater device authenticating second at least one video sink device to said first video repeater device; and

in cooperation with said video source device, authenticating said second ~~at least one~~ video sink device to said video source device.

20. (currently amended) The method of claim 19, wherein said first and second ~~at least one~~ video sink devices are authenticated to said video source device at substantially the same time.

21. (currently amended) The method of claim 19, wherein said method further comprises conveying topological information of said first and second ~~at least one~~ video sink devices ~~device~~ to said video source device.

22. (original) A video repeater apparatus comprising:

first communication interface to couple first at least one video sink device to said video repeater apparatus to exchange first authentication information with the at least one video sink device;

second communication interface to couple the video repeater apparatus to a video source device to first exchange second, then third authentication information to said video source device for first authenticating said video repeater apparatus, then said first at least one video sink device to said video source device; and

an authentication unit coupled to said first and second communication interfaces to authenticate said first at least one video sink device, and to generate the portions of said second and third authentication information of said video repeater apparatus and said first at least one video sink device to be provided to said video source device.

23. (original) The apparatus of claim 22, wherein

said first, second and third authentication information exchanged comprise corresponding pair-wise combinations of device key selection vectors of said video repeater apparatus, said at least one video sink device, and said video source device, with said second and third authentication information further comprising corresponding verification keys, and said second authentication information further comprising information identifying said video repeater apparatus as a video repeater device; and

said authentication unit comprises a ciphering unit to symmetrically generate said verification keys with corresponding authentication keys generated using the corresponding pair-wise combinations of the device key selection vectors.

24. (original) The apparatus of claim 23, wherein said ciphering unit further independently generates corresponding shared secrets between said video repeater apparatus and said at least one video sink device, and between said video repeater apparatus and said video source device using corresponding ones of said authentication keys.

25. (original) The apparatus of claim 24, wherein said ciphering unit further generates said verification keys using corresponding ones of said shared secrets.

26. (previously presented) The apparatus of claim 22, wherein

said first communication interface is to further exchange fourth authentication information of second at least one video sink device with another video repeater apparatus;

said third authentication information is also for authenticating said second at least one video sink device to said video source device.

27. (original) The apparatus of claim 26, wherein said third authentication information further comprises topological information of said first and second at least one video sink device.